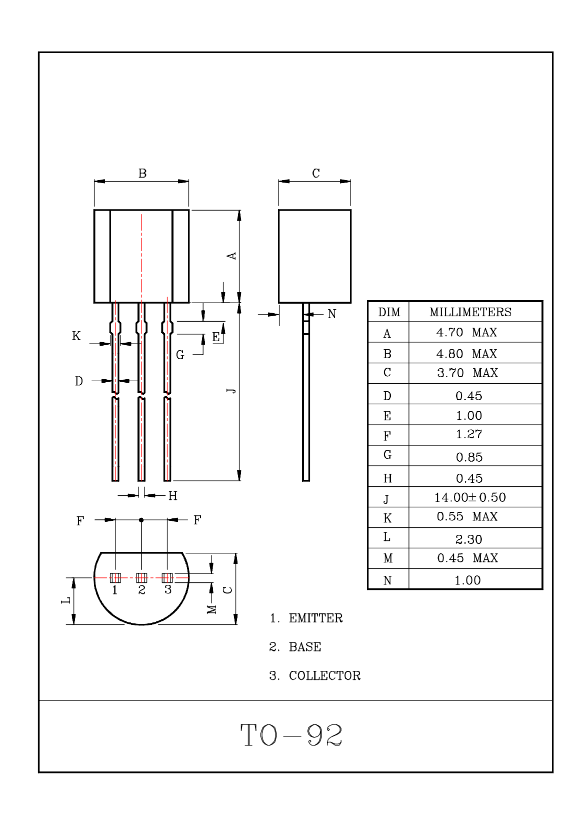


SEMICONDUCTOR
TECHNICAL DATA

KTC9014
EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES
- Excellent h_{FE} Linearity
  : $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$(Typ.).
- Low Noise :NF=1dB(Typ.) at f=1kHz.
- Complementary to KTC9015.



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.45
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00± 0.50
K	0.55 MAX
L	2.30
M	0.45 MAX
N	1.00

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Emitter Current	I_E	-150	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=50V, I_E=0	-	-	50	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	100	nA
DC Current Gain	h_{FE}(Note)	V_{CE}=5V, I_C=1mA	60	-	1000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA	-	0.1	0.25	V
Transition Frequency	f_T	V_{CE}=10V, I_E=-1mA, f=100MHz	60	-	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	2.0	3.5	pF
Noise Figure	NF	V_{CE}=6V, I_C=0.1mA, Rg=10kΩ, f=1kHz	-	1.0	10	dB

Note : h_{FE} Classification A:60～150, B:100～300, C:200～600, D:400～1000